## (Translation of Citation 5)

Patent Public Disclosure No. 111911/87

Laid open on May 22, 1987

Patent Application No. 215577/86

Filing Date: September 12, 1986

Priority Date: September 13, 1985

Priority Country: US

Priority Application Numbers: 775851

Applicant: Colgate-Palmolive Company

1. [Title of the Invention]

Anticalculus oral composition

- 2. [Scope of the claims]
- (1) An anticalculus oral composition in the form of toothpaste, dental gel, tooth powder, dental tablet, chewing gum or mint drop, which comprises:
  - a vehicle applicable to the oral cavity;
- A. 4.3% by weight to 7% by weight of an alkali metal pyrophosphate salt used as an essential anticalculus agent, which only consists of 4.3% or more by weight of tetrapotassium pyrophosphate, or comprises a mixture consisting of the tetrapotassium pyrophosphate and 2.7% or less by weight of tetrasodium pyrophosphate;
- B. a fluoride ion source in an amount enough to supply 25 to 5,000 ppm fluorine ions used as an inhibitor to inhibit hydrolysis of said agent by the action of enzymes existing in saliva; and
- C. 0% by weight to 3% by weight of a synthetic anionic polycarboxylate polymer having a molecular weight of approximately 1,000 to 1,000,000, and more preferably of approximately 30,000 to 500,000.
- (2) The anticalculus oral composition according to claim 1, which comprises tetrapotassium pyrophosphate and tetrasodium pyrophosphate at a weight ratio between 4.3:2.7 and 6:1.
- (3) The anticalculus oral composition according to claim 1, which comprises approximately 4.5% tetrapotassium pyrophosphate and approximately 1.5% tetrasodium pyrophosphate.